

REMARKS

This paper is filed in response to the final Office Action mailed on June 15, 2007. Claims 1-22 are pending in the application. Of these, Claims 1-14 are withdrawn from consideration as being directed to a non-elected invention. Claims 15-22 have been examined and stand rejected. Reconsideration of Claims 15-22 is respectfully requested.

The Rejection of Claims 15-18 and 20-22 Under 35 U.S.C. § 102(a)

Claims 15-18 and 20-22 are rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,370,013 (Iino et al.).

In response thereto, Claim 15 has been amended to more particularly point out the claimed invention.

Claim 15 is related to a printed circuit board with embedded capacitors. The printed circuit board includes a non-copper clad laminate having a plurality of inner via holes formed on its predetermined regions, *wherein the via holes define a perimeter*; a capacitor paste filled in the plurality of inner via holes formed on the non-copper clad laminate, *wherein the capacitor paste fills the via holes to the perimeter of the via holes*; copper foil layers provided on both upper and lower surfaces of the capacitor paste, the copper foil layers including top electrodes, bottom electrodes and signal circuit patterns, *wherein a top electrode formed by a copper foil layer contacts the top of the capacitor paste at least over the area defined by the perimeter of the via hole and a bottom electrode formed by a copper foil layer contacts the bottom of the capacitor paste at least over the area defined by the perimeter of the via hole*; resin coated copper (RCC) layers laminated to the top electrodes, the bottom electrodes and the signal circuit patterns; predetermined outer via holes and through-holes formed in the resin coated copper layers; and plating layers plated in the inner walls of the outer via holes and the through-holes.

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For a reference to be anticipatory, the reference must exactly describe the claimed invention. At best, Iino et al. only forms electrodes on the sides and corners of the capacitor. Iino et al. does not teach top and bottom electrodes that extend over the top and bottom of the capacitor paste over the area defined by the perimeter of the via hole.

Specifically, Iino et al. describes the capacitor 3 of Figure 2A has a capacitor body 3a that is formed by laminating ceramic dielectric layers 5. (Col. 6, lines 25-27.) The capacitor body 3a has four positive terminal electrodes 6a and four negative terminal electrodes 6b. In the capacitor 3 of Figure 2A, the negative terminal electrodes 6b are formed at the middle of each side of the capacitor 3 and the positive terminal electrodes 6a are formed at the corners of the capacitor 3. (Col. 6, lines 31-34.) Furthermore, Iino et al. describes a prepreg layer 1b made from fabric impregnated with a thermosetting resin juxtaposed at the bottom of the capacitor 3. (Col. 9, lines 23-24.) Accordingly, Iino et al. fails to teach or suggest various elements of Claim 15, including a capacitor paste that fills the inner via holes to the perimeter, top and bottom electrodes on and below the capacitor paste that contact the capacitor paste at least over the area defined by the perimeter of the via hole, and resin coated copper layers laminated to the bottom electrodes. For a reference to be anticipatory, the reference must exactly describe the claimed invention. Because Iino et al. does not exactly describe the above-mentioned limitations, the reference is not anticipatory.

Claims 16-18 and 20-22 depend from Claim 15. Because Claim 15 is allowable, Claims 16-18 and 20-22 are submitted to be allowable as well.

Accordingly, the withdrawal of the rejection is respectfully requested.

The Rejection of Claim 19 Under 35 U.S.C. § 103(a)

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Iino et al. in view of U.S. Patent Application Publication No. 2004/0116919 (Heim et al.).

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Claim 19 depends from Claim 15. As discussed above, Iino et al. does not describe nor render obvious Claim 15. Heim et al. is cited for disclosing that different sizes of BaTiO₃ powder are blended with epoxy to make the highly dielectric material and also for disclosing BaTiO₃ powder particles possess different sizes.

Therefore, even combining Heim et al. with Iino et al. is not suggestive of Claim 15.

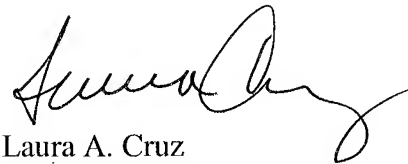
Accordingly, the withdrawal of the rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendment and remarks, applicants submit that this application should be passed to issue. If the Examiner has any further questions or comments, the Examiner is invited to contact the applicants' attorney at the number provided below.

Respectfully submitted,

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